

绞股蓝属及苔草属的四新种

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FOUR NEW SPECIES OF GYNOSTEMMA AND CAREX

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关键词 绞股蓝属; 五柱绞股蓝; 苔草属; 大庸苔草; 湘西苔草; 闽清苔草

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五柱绞股蓝 新种 图 1

Gynostemma pentagynum Z.P. Wang, sp. nov.

Species isolata, a congenera caulis et petiolia longe villosa, floribus masculis in panícula parva 3—5 cm longa dispositis, foemineis solitariis vel 2 (3) in racemo aggregatis, pedicellis usque 4 cm longis, gynoeciis e carpellis 5 (4) constatis differt.

Herba perennis, scandens, rhizomatibus brevibus succulentis. Caulis 2 m vel ultra, longus, 4 mm crassus, angulatus, longe albo-villosus. Cirrhi filiformes, inferne villosi, versus apicem glabrescentes, apice bifidi. Folia pedata, utrinque sparse pubescentis, sed in nervis dense villosula, margine leviter irregulareter serrata; petiolus 9—13 cm longus, longe villosus; foliola 7 (5), centralis ellipticum ca. 10 cm longum, petioluli 3—5 mm longi, lateralis gradatim minora et asymmetriciora, petiolulis brevioribus et in foliola extrema nullis. Flores dioecii. Flores masculi numerosi, in paniculam 3—4 cm longam villosam dispositi; calycis lobi 5, oblongi, 0.9 mm longi, 0.5 mm lati, apice obtusi, utrinque glabri; corolla rotata, 5-partita, lobis ovatis, 4 mm longis, 0.6 mm latis, apice longe acuminatis subtus glabris, super glanduloso-pilosis, obscure uninerviis; stamina 5, filamentis 0.2 mm longis in columna cannatis. Flores foeminei solitarii vel 2 (3) in racemo brevissimo aggregati; pedunculus 3—4

mm longus; pedicelli usque 4 cm longi; calycis et corollae characteres ut in floribus masculis: staminodia nulla; gynoecium e 5 (4) carpellis constatum, ovarii dense villosis et glanduloso-villosis, 5 - (4)-loculare, ovulo in quoque loculo solitario, stylis 5 (4) divaricatis, stigmatibus 2 horizontaliter patulis. Fructus non maturus.

Hunan: (湖南): Zhangjiajie (张家界), in sylvis vallium, Z. P. Wang (王正平) 87023 (♂ Typus NJU). 87022 (♀), 87024 (♂).

多年生攀援草本, 具短而呈肉质的根茎。茎长2米或更长, 粗约4毫米, 有稜, 被白色长柔毛。卷须丝状, 下部被长柔毛, 向顶端渐变为无毛, 顶端二叉。叶鸟足状, 两面疏生柔毛, 脉上密生细长柔毛, 边缘有稍不整齐的锯齿; 叶柄长9—13厘米, 具长柔毛; 小叶7 (5); 中央小叶椭圆形, 长约10厘米, 小叶柄长3—5毫米; 侧生小叶渐变小, 不对称, 小叶柄较短, 末级小叶无柄。

花雌雄异株。雄花多数, 排成长3—4厘米具长柔毛的圆锥花序; 花萼裂片5, 长椭圆形, 长0.9毫米, 宽0.5毫米, 顶端钝, 两面无毛; 花冠辐状, 5深裂, 裂片卵形, 长4毫米, 宽0.6毫米, 顶端丝状长渐尖, 下面无毛, 上面被腺毛, 有1条不明显的脉; 雄蕊5, 花丝长0.2毫米, 合生成柱状。雌花单生成2 (3) 朵形成极短的总状花序; 总花梗长3—4毫米; 花梗长达4厘米; 花萼及花冠的特征同雄花; 无退化雄蕊; 雌蕊由5 (4) 心皮组成, 子房密被柔毛及腺柔毛, 5 (4) 室, 每室一胚珠, 花柱5 (4), 广叉开, 柱头2, 平展。果实未成熟。

本种以其雌蕊为5 (4) 心皮组成而较孤立, 不同于同属的其它成员在于茎及叶柄均具长柔毛, 雄花形成短的圆锥花序, 雌花单生或2 (3) 朵聚成短总状花序, 雌花花梗长达4厘米, 雌蕊具5 (4) 花柱。

大庸苔草 新种 图2

Carex dayuensis Z. P. Wang, sp. nov.

Species *C. cardiclopi* Nees valde affinis sed squamis foemineis oblongis dilute brunneis, muticis, iis masculinis ligulatis differt.

Rhizoma breve, lignosum. Culmus 20—30 cm altus, gracilis, subcylindricus, laevis. Folia omnino basalia, culmo saepe longiora, 1—2 mm lata, plana vel plicata, utrinque glabra, marginibus asperata, vaginis brunneis plus minusve in fibras solutis

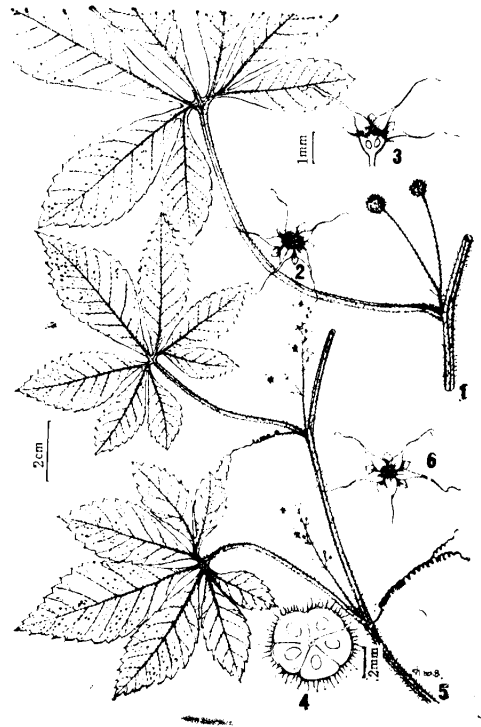


图1 五蕊胶股蓝 *Cynostemma pentagynum* Z. P. Wang

1. 雌株之一部分, 果未成熟; 2. 雌花; 3. 雌花纵切;
4. 子房横切; 5. 雄株之一部分; 6. 雄花 (史渭清绘)

obtecta. Spiculae 4-5, remotae; terminalis masculina clavata dilute brunnea, 3.5-4.5 cm longa, 2.5-3 mm crassa; laterales foemineae, cylindricae, 1.5-2 cm longae, circa 2.5 mm crassae, subaxilliflorae, longe pedicellatae, erectae, pedicellis setaceis scaberulis vel leavibus. Bracteae spathiformes, basi et margine rubro brunneae. Squamae foemineae oblongae, dilute brunneae, tenuiter membranaceae, circa 2-3 mm longae, 1.5 mm latae, apice truncatae et saepe leviter undulatae, muticae, dorso obscure trinerviae; masculae ligulatae, apice obtusae vel acuminatae, circa 6 mm longae, 1.5 mm latae, dorso unicostatae. Utriculi squamas subaequantes, suberecti membranacei, obovati, omnia dilute brunnei vel utroque latere virides, dense puberuli, plurinervi, basi oblique attenuati, apice in rostrum breviter conicum ore albido bidenticulato vel subtruncato subabrupte contracti. Nux arcte inclosa, obovata, castanea, annulo obscure coronata; styli basi conici, persistentes; stigmata 3.

Hunan (湖南): Zhangjiajie (张家界), in sylvis vallium, Z.P. Wang (王正平) 87025 (Typus NJU).

根茎短, 木质。秆高20—30厘米, 纤细, 近圆柱形, 光滑无毛。叶全部基生, 通常长于秆, 宽1—2毫米, 扁平或对折, 两面无毛, 边缘具糙毛; 叶鞘褐色, 多少呈纤维状分裂。小穗4—5枚, 彼此离开; 顶生者雄性, 棒状, 淡褐色, 长3.5—4.5厘米, 粗2.5—3毫米; 侧生者雌性, 圆柱形, 长1.5—2厘米, 粗约2.5毫米, 近疏花, 具长柄, 直立, 小穗柄聚毛状, 微粗糙或光滑。苞片佛焰苞状, 基部及边缘红褐色。雌花鳞片矩圆形, 淡褐色, 薄膜质, 长约2—3毫米, 宽约1.5毫米, 顶端截形, 常微呈波状, 无芒, 背部不明显三脉; 雄花鳞片舌状, 顶端钝或渐尖, 长约6毫米, 宽约1.5毫米, 背部一脉。果囊与鳞片近等长; 近直立, 膜质, 倒卵形, 淡褐色或两侧绿色, 密被微柔毛, 多脉, 基部不对称地渐狭, 顶端几突然收缩成短圆锥形的喙。喙口带白色, 二齿或近于截形。小坚果紧包于果囊中, 倒卵形, 栗色, 顶端冠以不明显的环; 花柱基部增粗, 圆锥形, 宿存; 柱头3。

本种与 *Carex cardiolepis* Nees 相似, 但雌花鳞片矩圆形, 淡褐色, 无芒, 雄花鳞片舌状, 易于区别。



图2 大庸苔草 *Carex dayuogensis* Z.P. Wang
1.植株; 2.雄花鳞片; 3.雌花鳞片; 4.雌花鳞片及果囊; 5.果囊; 6.小坚果。(史渭清绘)

湘西苔草 新种 图 3

Carex xiangxiensis Z.P.Wang, sp. nov.

Species *C. [purpureotinctae]* Ohwi affinis sed bracteis inflorescentiam leviter superantibus vel ima ea brevior, spiculis foemineis angustioribus, utriculis haud purpureo-punctatis infero adaxialiter saccatis differt.

Rhizoma breve, lignosum, crassum, Culmus 40—80 cm altus, 1.5—2 mm crassus, firmus, triqueter, glaber vel ad angulos leviter asperatus. Folia basalia 60—70 cm longa, usque 17 mm lata, supra secus costam puberula cetera glabra, subtus pubescentia; folia caulina inferiora vaginis atropurpureis integris vel lateribus ventralibus in fibris fissis, laminis nullis vel parvis, caulina mediana 1 vel 2, foliis basalibus evidenter minora, utrinque glabra, vaginata. Spiculae 4—5, erectae vel suberectae; terminalis mascula filiformis,

4—6 cm longa, 2 mm crassa, pedicellata; laterales foemineae, anguste cylindricae, densiflorae, 4—9 cm longae, circa 4—6 mm crassae, superiores remotiusculae brevius pedicellatae, inferiores remotae interdum ima distans longius pedicellatae. Bractae foliaceae, vaginatae, inflorescentiam leviter superantes interdum ima ea brevior. Squamae foemineae tenuiter membranaceae, ovatae vel oblongae, interdum apice emarginatae, dilute brunneae, e dorso trinerves in mucronem vel aristam brevem excurrentes; squamae masculae ligulatae, brunneae, 5 mm longae, 1 mm latae, mucronatae. Utriculi squamis longiores et latiores, reflexi, membranacei, obovati vel elliptici, subinflato-trigoni, 3.5—4 mm longi, brunneo-olivacei, nitiduli, glabri, tenuiter nervati, infero adaxiali saccati, in rostrum longum rubrobrunneum glabrum ore tenuiter membranaceo bidentato sensim desinentes. Nux subarcte inclusa, brunneo-flava, rhombeo-elliptica, trigona, 2.3 mm longa, basi oblique stiptata, styli basi leviter incrassati; stigmata 3.

Hunan (湖南): Zhangjiajie (张家界), in sylvis vallium, Z. P. Wnag (王正平) 87019 (Typus NJU).

根茎短, 木质, 粗壮。秆高40—80厘米, 粗1.5—2毫米, 硬, 三稜形, 无毛或在稜上具糙毛。基生叶长60—70厘米, 宽达17毫米, 上面沿中脉具微柔毛, 其余部分无

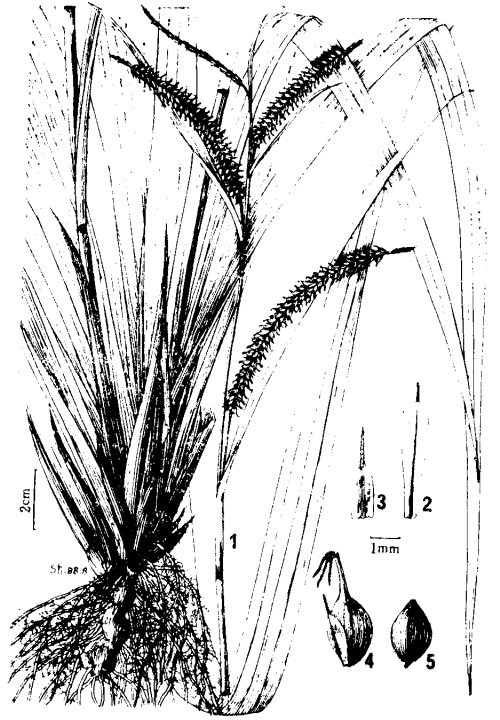


图3 湘西苔草 *Carex xiangxiensis* Z.P.Wang
1.植株; 2.雄花鳞片; 3.雌花鳞片; 4.雌花鳞片及果囊; 5.小坚果。(史渭清绘)

毛；秆下部叶无叶片或具短叶片，叶鞘暗紫色，完整或在腹侧裂成纤维状，中部叶 1 或 2 枚，明显小于基生叶，两面无毛，具鞘。小穗 4—5，直立或近于直立；顶生者雄性，线形，长 4—6 厘米，粗 2 毫米，具柄；侧生者雌性，狭圆柱形，密花，长 4—9 厘米，粗约 4—6 毫米，上部小穗间距短，具较短的柄，下部小穗间距稍长或有时最下面的一枚远离，均具较长的柄。苞片叶状，具鞘，略高出花序，有时最下一枚较花序短。雌花鳞片薄膜质，卵形或椭圆形，有时顶端微凹，淡褐色，具 3 脉，脉在顶端延伸成尖头或短芒；雄花鳞片舌状，褐色，长 5 毫米，宽约 1 毫米，具小尖头。果囊长于鳞片且较宽，向下垂悬，略呈肿胀三棱形，长 3.5—4 毫米，褐橄榄绿色，稍具光泽，无毛，具细脉，下部向轴面膨大呈囊状，顶端渐狭成红褐色的喙，喙口部膜质，二齿。小坚果稍紧密地包于果囊内，褐黄色，菱状椭圆形，三棱，长 2.3 毫米，基部具歪柄。花柱基部增粗。柱头 3。

本种接近于太鲁阁苔草 *Carex purpureotincta* Ohwi，与其不同处在于苞片略超出花序或最下方一枚短于花序，雌小穗较狭，果囊无紫色斑点，下部向轴面呈囊状，倒悬于轴上。

闽清苔草 新种 图 4

Carex minquinensis Z. P. Wang, sp. nov.

Species *C. metallica* Lèveillè affinis sed bracteis inferioribus inflorescentio brevioribus, spiculis omnino unisexualibus, utriculis minoribus horizontaliter patentibus apice (restro incluso) glabris basi obliquis adaxialiter inflatis differt.

Rhizoma lignosum, crassum, breve. Culmus 50—90 cm altus, gracilis, triqueter, glaber, cernuus, basi vaginis vestustis brunneis plus minusve in fibras solutis cinctus. Folia basalia culmo breviora, 4—6 mm lata, flaccida, plana, utrinque glabra, supra scabra, subtus leavigata; folis caulina 1, vaginis 3.5—4 cm longis. Spiculae 7—8; terminalis masculis, saepe pedicellata, anguste linearis, 1—4 cm longa; laterales foemineae, cylindricae, subdensae, 1—5.5 cm longae, circa 10 mm diam. 2 vel 3 ex unica bractea saepe enatae, superiores congestae vel remotae breviter pedicellatae erectae, inferiores distantes longe pedicellatae saepe pendulae, pedicelli setacci scaberuli. Bractea foliaceae, superiores inflorescentiam superantes breviter vaginatae, inferiores inflorescentia breviores sed

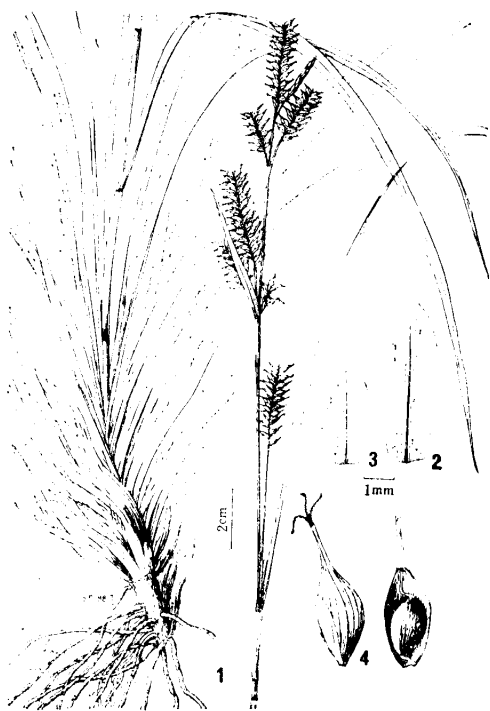


图 4 闽清苔草 *Carex minquinensis* Z.P.Wang
1. 植株；2. 雄花鳞片；3. 雌花鳞片；4. 雌花鳞片及果囊；5. 果囊纵切。（史渭清绘）

sporum spiculis, axillaribus longiores longe vaginatae, utrinque scaberulae. Squamae foemineae ovatae vel ellipticae, tenuiter membranaceae, pallidae, circa 3.5 mm longae, 1.5 mm latae, apice obtusae interdum emarginatae vel mucronatae raro acutae, dorso 1 stramineo-nervatae; squamae masculae ligulatae, 4—6 mm longae, 1.5—2 mm latae. Utriculi squamis longiores et latiores, ovati, horizontaliter patentés, tenuiter chartacei, dilute straminei, nitiduli, valde inflati, 4—5 mm longi, circa 1.5 mm crassi, plurinerves, basi oblique constricti, apice in rostrum longum glabrum ore tenuiter membranaceo bidentato sensum attenuari. Nux laxa inclosa, rhombeo-elliptica, trigona, 2 mm longa, castanea, angulis falavis, apice styli basi curvi instructa; stigmata 3, breviora.

Fujian (福建): Minquin county (闽清县), Z. P. Wang et G. H. Ye (王正平、叶光汉), 74202 (Typus NJU).

根茎木质, 粗短。秆高50—90厘米, 纤细, 三稜, 无毛, 上部下垂, 基部围以多少呈纤维状分裂的褐色枯老叶鞘。基生叶短于秆, 宽4—6毫米, 质软, 扁平, 两面无毛, 上面粗糙, 下面光滑; 茎生叶1片, 具长3.5—4厘米的鞘, 小穗7—8枚; 顶生者雄性, 常有柄, 狭线形, 长1—4厘米; 侧生者雌性, 圆柱形, 近于密花, 长1—5.5厘米, 粗约10毫米, 每苞内常生有2或3枚小穗, 上部小穗密集或彼此间距小, 具短柄, 直立, 下部小穗间距大, 具长柄, 下垂; 小穗柄鬃毛状, 略粗糙。苞片叶状, 上部者超过花序, 具短鞘, 下部者短于花序, 但超过其腋生小穗, 具长柄, 均于两面微糙。雌花鳞片卵形或椭圆形, 薄膜质, 苍白色, 长约3.5毫米, 宽1.5毫米, 顶端钝, 有时微凹或具小尖头, 稀可尖锐, 背部有一条草黄色的脉; 雄花鳞片舌状, 长4—6毫米, 宽1.5—2毫米。果囊长于鳞片, 卵形, 呈水平开展, 薄纸质, 淡草黄色, 稍有光泽, 极肿胀, 长4—5毫米, 粗约1.5毫米, 多脉, 基部不均衡地收缩, 顶端渐狭成长而无毛的喙, 喙口部薄膜质, 二齿, 小坚果极宽松地包于果囊中, 菱状椭圆形, 三稜, 栗色, 稜上黄色, 顶端有弯曲的花柱基部, 柱头3, 短。

本种与金光苔草 *Carex metalleca* Léveillé 相似, 但下面的苞片短于花序, 小穗全为单性, 果囊较小, 水平开展, 顶端(包括喙)无毛, 基部于向轴面膨大等特征可以区别。